



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/765,470

01/28/2004

Henrik Olsson

024944-194

9443

21839

7590

03/22/2007

BUCHANAN, INGERSOLL & ROONEY PC

POST OFFICE BOX 1404

ALEXANDRIA, VA 22313-1404

EXAMINER

KRAUSE, JUSTIN MITCHELL

ART UNIT

PAPER NUMBER

3682

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/765,470

Applicant(s)

OLSSON ET AL.

Examiner

Justin Krause

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/1/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Species II (figures 3 and 4) in the reply filed on December 21, 2006 is acknowledged. The traversal is on the ground(s) that the entire application can be examined without serious burden. This is not found persuasive because a search of all of the embodiments would be a serious burden. As stated in paragraph 3 of the restriction requirement mailed November 21, 2006, a text search of one embodiment would not cover the other embodiments.

The requirement is still deemed proper and is therefore made FINAL.

Claims 4-6, and 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 21, 2006.

### ***Drawings***

The drawings are objected for the reasons set forth on the attached PTO-948 form. The elected figures are very darkly shaded making examination of the figures and determination of where the leader lines are directed difficult. Figures 3 and 4 have been examined as best understood by the examiner.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the radial gable wall

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 1-3, 7-16 and 18-20 is/are generally narrative, mixing positively recited structure with functional language such that is not clear what exactly should be given

patentable weight. For clarity and readability, the examiner suggests re-writing the claims in accordance with 37 CFR 1.75(i).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 7-16 and 18-20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 13, it is unclear if the "radial gable wall" is the same feature as the "radially extending surface 12b" or a different feature.

In claim 1, "the wall of the bearing housing" lacks antecedent basis because the claim previously claims three walls, the housing wall, an axially extending wall portion and a radial gable wall, all of which are walls of the bearing housing.

In claims 8, 10, 12, and 19, it is unclear what shape "bulge" is, and further the hyphenating of the phrase "bulge-formed" makes it unclear if the material conglomeration is formed by a process (i.e., the material conglomeration is bulge-formed), or if the material conglomeration is formed in the shape of a bulge. Both interpretations are unclear.

In claim 13, "the space" lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

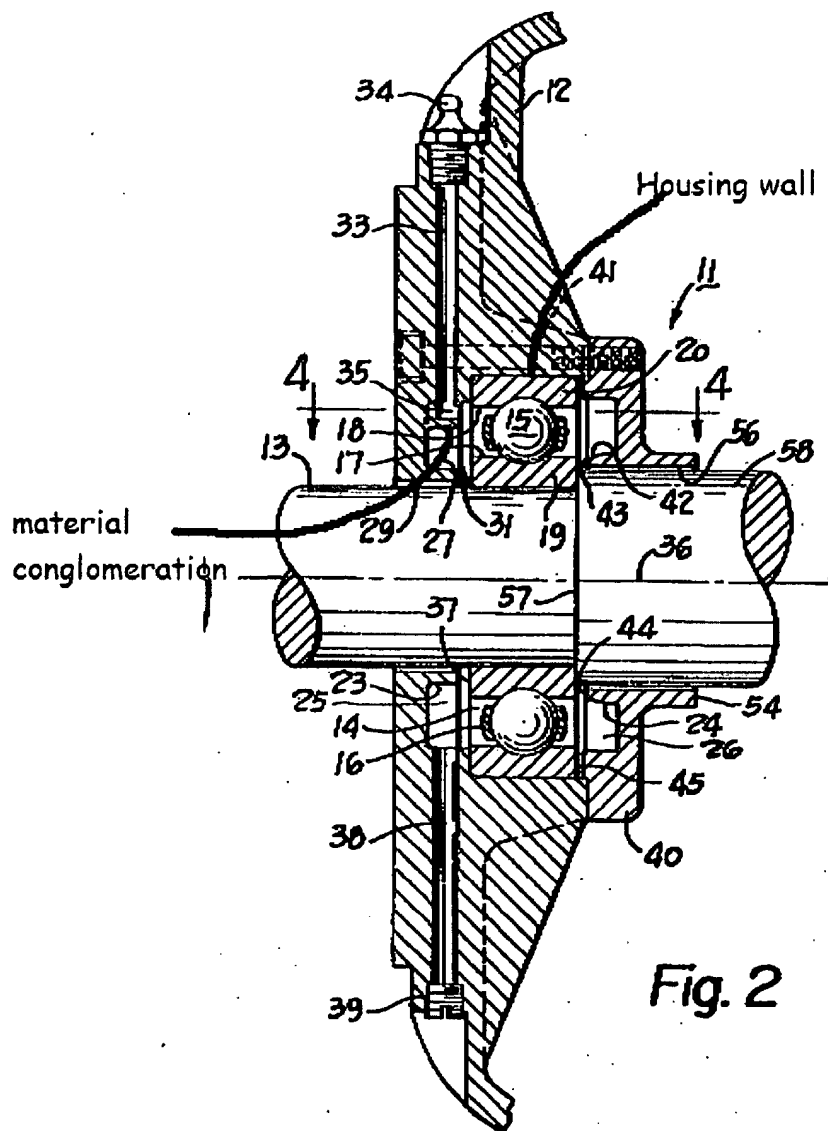
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-17 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Simmons et al. (US Patent 4,082,381).

Simmons discloses a grease lubricated bearing housing (12) possessing an interior and having a housing wall (see figure below) arranged to form a bearing seat for an outer race ring of a bearing, and having on each axial side of the bearing seat a space (25 and 26) limited by an axially extending wall portion and a radial gable wall, the bearing housing having an opening (29) for receiving a shaft supported in the bearing, the wall of the bearing housing being provided with a through bore (35) adapted to receive a grease nipple and opening to the interior of the bearing housing in at least one of the two spaces axially outside the bearing seat, an interior of the bearing housing wall being provided with a material conglomeration (see fig below) positioned in relative to the through bore opening into the interior of the bearing housing so that the material conglomeration urges grease introduced through the through bore to move primarily towards the bearing seat to inhibit grease from primarily filling out the space into which the through bore opens.

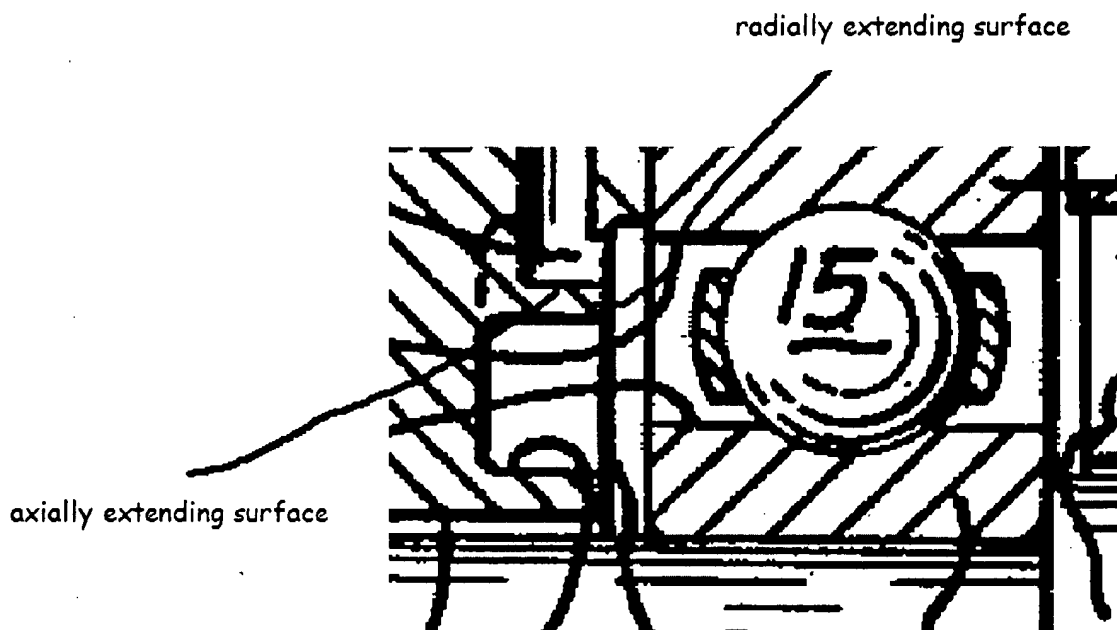


Regarding claim 2, the through bore has an orifice extending through at least part of the material conglomeration, projecting towards the bearing seat.

Regarding claim 3, the material conglomeration possesses a stepped portion comprised of an axially extending surface and an adjoining radially extending surface,

Art Unit: 3682

the radially extending surface facing the bearing seat, and the through bore extending through the material conglomeration and opening in the axially extending surface, with the radially extending surface of the stepped portion in combination with the axially extending surface forming a shield urging grease introduced through the through bore to move primarily towards the bearing seat while also preventing grease from primarily filling out the space into which the through bore opens.



Regarding claims 7, 9, and 11, the material conglomeration is an integrated portion of the housing wall.

Regarding claims 8, 10 and 12, as best understood, the material conglomeration is a bulge-formed integrated portion of the housing wall.

Regarding claim 20, the through bore is positioned so the radially extending surface forms a shield.



Regarding claim 13, Simmons discloses a grease lubricated bearing housing comprising two housing parts (12, 40) which together form a housing interior provided with a bearing seat in which is seated an outer race ring of a bearing, with an annular chamber (25 or 26) located on at least one axial side of the bearing seat, the space being limited by an axially extending wall portion and a radial gable wall, the bearing housing having an opening at least at one end for receiving a shaft passing at least partially through the bearing housing, a first one of the housing parts being provided with a bore (35) extending from exterior of the bearing housing and opening into the space at a position axially outside the bearing seat, the bore being adapted to receive a grease nipple (34) to permit grease to be introduced into the housing interior, the first housing part having an interior provided with a shield (see figure below) which directs grease introduced through the bore in a direction towards the bearing seat while also inhibiting grease from primarily filling out the space into which the bore opens.

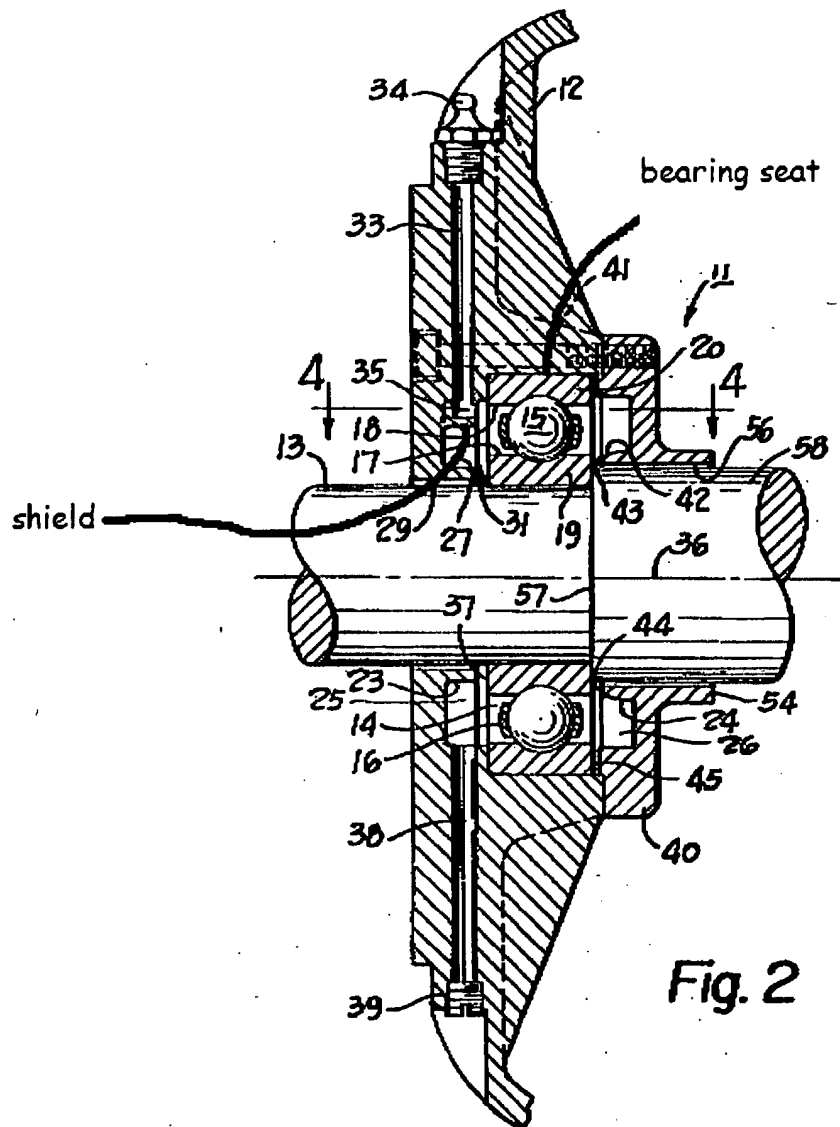


Fig. 2

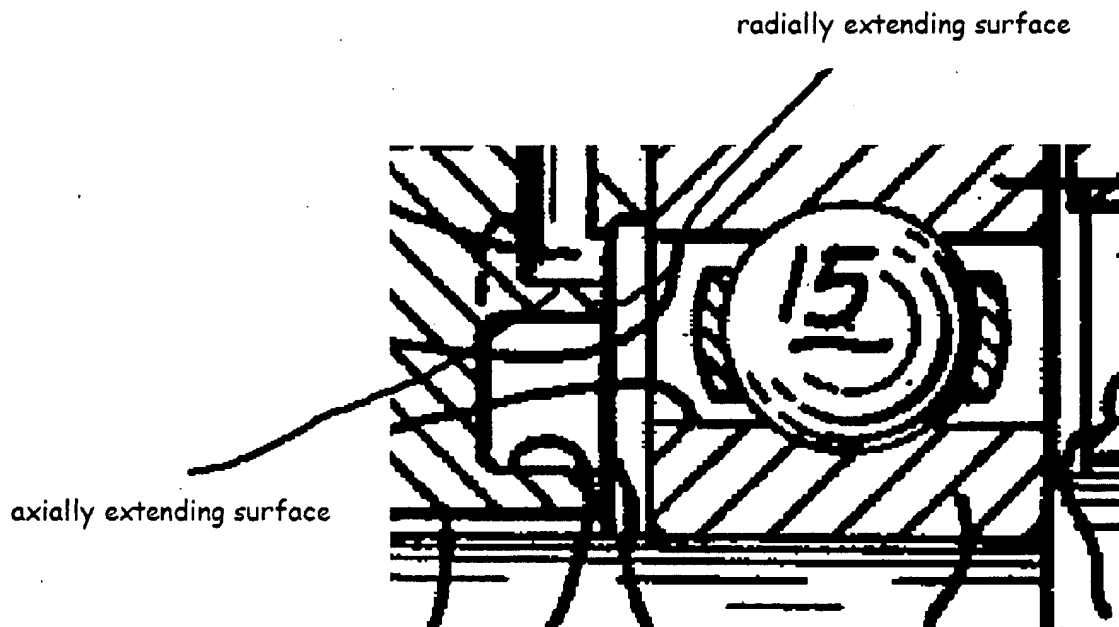
Regarding claim 14, the shield is integrally formed in one piece with the first housing part (12) and the bore extends through part of the shield.

Regarding claim 15, the shield is a material conglomeration integrally formed in the first housing part and extending inwardly from the interior of the first bearing

Art Unit: 3682

housing part, the bore having an orifice extending through at least part of the material conglomeration directed at the bearing seat.

Regarding claim 16, the shield possesses a stepped configuration comprised of an axially extending surface and an adjoining radially extending surface, the radially extending surface facing the bearing seat and the bore extending through the shield and opening in the axially extending surface.



Regarding claim 18, the shield is an integrated portion of the first housing part.

Regarding claim 19, as best understood, the shield is a bulge-formed integrated portion of the first housing part.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,066,146

US 3,628,835

US 4,820,061

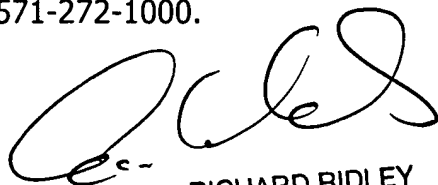
US 3,811,743

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK  
JMK 3/15/07

  
RICHARD RIDLEY  
SUPERVISORY PATENT EXAMINER